

**Proposed Amendment between California Energy Commission
and
The Regents of the University of California, Davis-Western
Cooling Efficiency Center**

Title: Western Cooling Efficiency Center Research
Amount: \$0.00
Term: No term change
Contact: Joseph Fleshman
Committee Meeting: 2/1/2011

Recommendation

Approve this no-cost amendment to contract 500-08-042 with Western Cooling Efficiency Center - UC Davis. Staff recommends placing this item on the consent calendar of the Commission Business Meeting.

Issue

The contractor incorrectly interpreted the meaning of the fringe benefit rate listed in the contract. The contractor listed the average fringe benefit rate instead of the maximum (cap) fringe rate. Because the university has different fringe rates for various job classes, this amendment would increase the cap to account for this variation. This amendment does not increase the total fringe benefits cost identified in the contract because the average rate was used to calculate the fringe amounts in the budget. The fringe benefit costs in the budget remain unchanged.

Background

This contract was approved at the May 27, 2009 Business Meeting for \$2,100,000 of PIER electric funds.

This contract addresses electric use related to cooling, particularly in the residential and small commercial sector, where equipment is particularly unsuited to hot, dry conditions and likely to fail due to poor maintenance. Many potentially effective cooling technologies are not commercialized because of technical gaps. Beyond technical issues, market and development issues hinder new technologies as companies with limited resources struggle to cross the so-called 'valley of death' to bring new technologies into the California marketplace.

Proposed Work

The proposed research will conduct basic research and technology development where needed to advance cooling system performance, develop new technologies and approaches to reducing cooling-related energy and power demand in western climates. It will assist companies with promising technologies through the Emerging Technologies programs of California utilities and pool research results among utilities. It will provide an information conduit to the Public Utilities Commission and inform the public and industry, effectively increasing leverage of research and development funding.

This project will:

- Conduct basic research and technology development related to evaporative surfaces, heat and mass transfer.

- Develop hybrid evaporative-vapor compression cooling technology, thermal storage systems, equipment which uses large available heat sinks, and pre-cooling AC condenser air.
- Develop specifications and advancing markets for advanced, next-generation conventional cooling equipment through the 'Western Cooling Challenge'.
- Assist entrepreneurial companies achieve market success through development assistance and providing guidance and assistance to utility emerging market programs.